

## BOOK REVIEW

*The Illustrated Companion to Gleason and Cronquist's Manual: Illustrations of the Vascular Plants of Northeastern United States and Adjacent Canada* by Noel H. Holmgren. 1998. xvi + 937 pp. line drawings. ISBN 0-89327-399-6 \$125.00 (hardback). The New York Botanical Garden, Bronx, NY.

One of the most difficult tasks in teaching plant identification is that of helping students become comfortable with technical keys and descriptions. All too often I find students resorting to their field guides, with alluring color photos or line drawings and no difficult or confusing terminology. I rejoiced when the second edition of Gleason and Cronquist's *Manual of Vascular Plants of Northeastern United States and Adjacent Canada* was published in 1991. Although many students (like myself 20 years ago) still whine their way up that steep slope to the plateau of accomplishment, I find most students eventually have a high degree of success in keying the local flora without much interference from me.

My new class stumbling block is that the students still would like a visual confirmation of their identification in some cases. Back to the field guides, with the main disadvantages being that all of our local flora isn't illustrated, and that, in many cases, students still aren't able to distinguish between similar species. I sometimes borrow our herbarium library's volumes of Gleason's 1952 *The New Britton and Brown Illustrated Flora of the Northeastern United States and Adjacent Canada* for class use, but I find students reluctant to use these because of the outdated nomenclature. If students are feeling overwhelmed using one technical manual they are unlikely to subject themselves to a second with new and different idiosyncracies. Likewise, they rarely explore the herbarium to confirm or reject an identification.

Thus, I was very happy to receive the newly published *The Illustrated Companion to Gleason and Cronquist's Manual*. Noel Holmgren, with the artistic and editorial assistance of Patricia K. Holmgren, Robin A. Jess, Kathleen M. McCauley, and Laura Vogel, has compiled a volume of illustrations that combines the taxonomy in Gleason and Cronquist's second edition with the high quality illustrations in Gleason's *Illustrated Flora*. But the new volume is not merely a rearrangement of the old illustrations; new drawings were made for species described since 1952, new

details were added to some illustrations, and a reassessment of diagnostic features was made where species have been placed in synonymy or names misapplied. The result is a volume of accurate technical illustrations with updated taxonomy corresponding to the best volume of technical keys and descriptions for the northeastern United States and adjacent Canada. My students will be ecstatic!

Beyond the classroom, this volume should appeal to professionals, too. Many of us have suffered the frustration of trying to identify a difficult unknown without herbarium specimens for comparison. Also, good technical illustrations can help us where herbarium specimens sometimes cannot, like with dissections of flowers or fruits. I always feel much more confident with the identification of an unknown grass if I have Gleason's *Illustrated Flora* close by!

*The Illustrated Companion to Gleason and Cronquist's Manual* probably will be most useful in the lab. Its weight (6 lb. on my bathroom scale) and 8 × 11 inch size will preclude use as a field guide. Since the drawings have been made from herbarium specimens, the "match" for some specimens will be best when they are flat, too.

The book has some useful and interesting features beyond the illustrations, as well. In the introduction, the author details the histories of Gleason's *Illustrated Flora* and Gleason and Cronquist's *Manual*, and he describes how they come together in this new book. There is also information provided on the artists whose anonymous contributions graced the *Illustrated Flora*. Since the taxonomy of our flora is ever-changing and many of the names used in Gleason and Cronquist's second edition are already outdated, the *Illustrated Companion* has an appendix cross-referencing names used in Gleason and Cronquist's second edition (and, thus, this new book) with those used in *Flora of North America, Volume 2* and *Volume 3*. The book has two indexes. The first is an index to all common names used in Gleason and Cronquist's second edition, and includes the scientific name for each entry in parentheses for convenience. The second is an index to scientific names.

Overall, *The Illustrated Companion to Gleason and Cronquist's Manual* will be a much-appreciated addition to our class, herbarium, and personal libraries. It will be an indispensable tool to

students and professionals identifying vascular plants in the northeastern United States and adjacent Canada.

LITERATURE CITED

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